



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

m-2

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

10/605,036

09/03/2003

Masahiko Fukuda

SIC-03-032

2035

29863

7590

08/01/2007

DELAND LAW OFFICE

P.O. BOX 69

KLAMATH RIVER, CA 96050-0069

EXAMINER

CHARLES, MARCUS

ART UNIT

PAPER NUMBER

3682

MAIL DATE

DELIVERY MODE

08/01/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/605,036 | FUKUDA, MASAHIKO | |
| | Examiner | Art Unit | |
| | Marcus Charles | 3682 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) 8, 13 and 14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 9-12 and 15-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is responsive to the amendment and RCE filed 5-23-2007, which has been entered. Claims 1-27 are currently.

Continued Examination Under 37 CFR 1.114

1. The request filed on 5-23-2007 for a Request for Continued Examination (RCE) under 37 CFR 1.114 based on parent Application No. 10/605,036 is acceptable and a RCE has been established. An action on the RCE follows.

Drawings

2. The examiner has accepted the drawing filed with this application.

Specification

3. The disclosure is objected to because of the following informalities: in paragraph [0019], line 4, the reference numeral "20" should be --4--. Note, reference 4 depicts the drive mechanism and reference 20 depicts the opening.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1-27 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed,

Art Unit: 3682

had possession of the claimed invention. The specification fails to clearly disclose as to what the drive mechanism is. The claim is reciting what the housing of the drive mechanism is not but there is no clear description in the specification to alternate housings.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

7. Claims 1-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 1, the phrase/limitation "other than a housing of a motor itself is" is a negative limitation and is unclear and confusing because it is not clear as to what the drive mechanism housing is. No alternative drive mechanism housing is recited in the specification.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-3, 9-12 and 15-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP (1010613) in view of Kerdjoudj et al. (D451, 072). EP (1010613) discloses the claimed invention including the derailleur comprising a motor housing (56) which constitutes a base member having two base housing portions (56a, 56b), a drive motor including a motor housing (262) enclosed in the spacing between the housing

Art Unit: 3682

portions (56a, 56b). EP (1010613) fails to disclose a misalignment structure inhibiting structure between the first and second base housing portions to inhibit the misalignment of the housing by inhibiting the misalignment of the first and second housing portion, wherein the misalignment structure comprises an interlocking structure. Kerdjoudj et al. disclose a housing having a misalignment mechanism comprising an interlock mechanism (not labeled, see previous attached drawing). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the housing bases of EP (1010613) so that the alignment mechanism include interlocking features in view of Kerdjoudj et al. to make the connection easier and to ease the complexity of assembly. In addition, it is apparent the misalignment structure will inherently inhibit the misalignment of the motor housing because the misalignment structure will prevent lateral movement of the housing portions during assembling thus preventing inadvertent movement of the motor housing.

In claim 2, note the derailleur is a four link mechanism.

In claim 3, note each links has a pivot such that two links portions having a pivot coupled to the drive mechanism and the other two to a chain guide.

In claims 4-7,9, 19-12, Kerdjoudj et al disclose the claimed invention.

In claim 22, note EP (1010613) discloses each of the first and second base members are structured to accommodate a screw (64, 66) extending therethrough.

In claims 15-21 and 23-24 Kerdjoudj et al. the claimed invention.

10. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over EP (1010613) in view of Billman et al. (6,028,384). EP (1010613) discloses the claimed

Art Unit: 3682

invention including the derailleur comprising a motor housing (56) which constitutes a base member having two base housing portions (56a, 56b), a motor with a housing enclosed in the spacing between the housing portions. EP (1010613) fails to disclose a misalignment structure inhibiting structure between the first and second base housing portions such that the misalignment comprises an interlocking structure. Billman et al. a housing structure (10) comprising a first base member (38) and a second base member (42), a motor housing (see 16) disposed between the first and second housing portions (10 and 14), wherein each of the base members comprises a misalignment interlocking structure (see attached drawing in prior action). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device of EP (1010613) to include the structure of Billman et al. in order to facilitate proper alignment during assembling. In addition, it is apparent the misalignment structure will inherently inhibit the misalignment of the motor housing because the misalignment structure will prevent lateral movement of the housing portions during assembling thus preventing inadvertent movement of the motor housing.

11. Claims 20-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP (1010613) in view of Kerdjoudj et al. (D451, 072). EP (1010613) as applied to claim 1 above, and further in view of Kerdjoudj et al. (6,054,785). EP (1010613) in combination with Kerdjoudj et al. (D451, 072) does not disclose each or the first and second includes a recess for receiving the first and second ends of a tubular interlock member. Kerdjoudj et al. ('785) discloses a first base (16) having a recess (see attached drawing) and a second base (14) having a recess such that each of the first and second

Art Unit: 3682

recess receives a first and second end of an interlocking member (34). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the device of EP (1010613) to include the limitation of Kerdjoudj et al. ('785) in order to prevent inadvertent movement between the bases and enhance proper alignment.

12. Claim 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP (1010613) in view of Kerdjoudj et al. as applied to claim 1 above, and further in view of Hardey et al. (5,737,968). EP (1010613) and Kerdjoudj fail to disclose the housing is exposed between the first and second base members. Hardey discloses a housing (30) exposed within with first and second base members (27-29) and is exposed between the base members. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the device of EP (1010613) so that the housing member is exposed between the first and second base members and exposed between the first and second base in order be able to remove or maintain the housing without dismantling the base members.

Allowable Subject Matter

13. Claim 27 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Citation

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Note the prior art cited in attached PTO Form 892.


Art Unit: 3682

Response to Arguments

14. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection set forth above. For reasons given above the new limit does not carry any patentable weight.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marcus Charles whose telephone number is (571) 272-7101. The examiner can normally be reached on Monday-Thursday 7:30 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ridley Richard can be reached on (571) 272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


Marcus Charles
Primary Examiner
Art Unit 3682
July 24, 2007